

# **Iowa Department of Natural Resources Flood Plain Management Program**

## **Project Information Checklist Streambank Revetment Measures (Riprap)**

In order for an application for a streambank revetment project to be considered complete and to allow the Department to undertake a review of the project, all of the items listed below must be submitted. An application is not placed in the review queue until all of the required items are received. Note that the Department may still need to request additional information.

Information pertaining to streambank stabilization methods, including riprap or revetment measures, can be found at the following link by clicking on "How to Control Streambank Erosion".

<http://www.iowadnr.com/water/stormwater/forms.html#manuals>.

- \_\_\_\_\_ Completed and signed DNR Form 36, *Joint Application Form – Protecting Iowa Waters*. Please indicate if the project site is within the incorporated limits of a city by using the word 'in' when listing the city in Item 7 of the application. The application can be found online at the following link. <http://www.iowadnr.com/water/floodplain/index.html>
  
- \_\_\_\_\_ A to-scale or dimensioned site map showing the project area, property lines and ownership, roads, buildings, existing levees or spoil banks and any other pertinent physical features. The plan should show the length of the stream reach to be protected. Crop (compliance) photos available at the county Farm Service Agency are usually satisfactory for use as a base for the site map. In addition, topographic maps and aerial photos that are available at the following website can be utilized for site maps. <http://ortho.gis.iastate.edu/>
  
- \_\_\_\_\_ A to-scale or dimensioned cross sectional view of the project showing the bank height, bank slope - both existing and proposed, stream width (measured from top of bank to top of bank) and a depiction or description of the protection measures including all appropriate dimensions. Include any site preparation work planned for the bank such as sloping, terracing (benching) or filling.
  
- \_\_\_\_\_ Type and size of material to be used including any filter fabrics or bedding material. Please note that generally accepted revetment material includes field stone, quarry rock and broken concrete. When using broken concrete, all exposed reinforcing steel must be removed or cut flush with the surface of the concrete prior to placement. Any concrete slabs larger than three feet across must be broken into smaller pieces prior to placement. The use of asphalt or other solid waste is prohibited. The horizontal thickness of a revetment blanket must not exceed four feet. However, the revetment blanket thickness may be further restricted depending on the size of the stream channel.
  
- \_\_\_\_\_ Indicate the spoil disposal site. Please note that disposal of the spoil material directly on top of the streambank in the form of a levee or dike is generally prohibited. The preferred disposal method is to haul the material out of the flood plain. In some instances you may be allowed to spread the spoil thinly (less than six inches thick) across the flood plain. The spoil must not be placed in a floodway as designated in a flood insurance study or in an area that is or could be considered a regulated wetland.